

CLAIMS

1. A chip resistor comprising:

5 a resistor element including an electrode-forming surface;

at least two electrodes provided at the electrode forming surface; and

an insulating layer provided at the electrode-forming surface;

10 wherein the electrode-forming surface includes an inter-electrode region positioned between the two electrodes and covered by the insulating layer, and wherein the insulating layer has a thickness which is equal or generally equal to a thickness of the electrodes.

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2. The chip resistor according to claim 1, wherein the thickness of the insulating layer is smaller than the thickness of the electrodes, and wherein difference between the thickness of the insulating layer and the thickness of the electrodes is
20 so set that, when the resistor element flexes upon receiving a load, the insulating layer comes into contact with a flat mount surface before the resistor element is damaged.

3. The chip resistor according to claim 1, wherein the thickness
25 of the insulating layer is smaller than the thickness of the electrodes, and wherein difference between the thickness of the insulating layer and the thickness of the electrodes is

set to be smaller than maximum deflection δ_{\max} of the resistor element when maximum bending stress σ_{\max} produced in the resistor element reaches elastic limit σ_y of the resistor element.

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4. The chip resistor according to claim 1, wherein the insulating layer is formed by thick film printing.

5. A method for manufacturing a chip resistor, the method
10 comprising the steps of:

pattern-forming an insulating layer on an electrode-forming surface of a resistor element material;

forming a conductive layer on the electrode-forming surface at a region where the insulating layer is not formed,
15 the conductive layer having a thickness which is equal or generally equal to a thickness of the insulating layer; and

dividing the resistor element material into a plurality of resistor elements each in the form of a chip;

wherein the division of the resistor element material is
20 so performed that each of the resistor elements in the form of a chip includes part of the insulating layer and electrode portions spaced from each other by the part of the insulating layer.

25 6. The manufacturing method according to claim 5, wherein the pattern-forming of the insulating layer is performed by thick film printing.

7. The manufacturing method according to claim 5, wherein the formation of the conductive layer is performed by plating.

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8. The manufacturing method according to claim 5, wherein the division of the resistor element material is performed by punching.

10 9. The manufacturing method according to claim 5, wherein the division of the resistor element material is performed by cutting.